

REMARKS

Claims 1-6, 12-14 and 21-23 are pending in this application. By this Amendment, claims 7-11 and 15-20 are canceled, claims 6, 13 and 14 are amended, and claims 22 and 23 are added. No new matter is added.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Patterson in the July 7 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

I. §103 Rejections Over Suzuki

Claims 1, 2 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP 6,246,777 to Suzuki et al. (Suzuki). Applicants respectfully traverse the rejection.

As agreed to in the July 7 personal interview, Suzuki fails to teach or suggest the following feature of claim 1: "[a]n insertion-molded cylindrical article,...wherein said mark is positioned at said inner surface of the cylindrical molded body while being inwardly apart from said upper end of said insert in an axial direction and at a position corresponding to a position on said inner surface that is covered by said insert" (emphasis added).

The article of claim 1 has a mark that is inwardly apart from said upper end of said insert and on said inner surface that is covered by said insert. At paragraph [0011], Suzuki discloses that the "two or more runners 32 who connect the injection gate 41 and the cavity 51 mentioned later are drilled in the upper part of a core 31" (emphasis added). As clearly seen in Fig. 1 of Suzuki, and as agreed to in the personal interview, the injection gates 32 in the mold of Suzuki are positioned at the top of the mold above the highest edge of the blank board 103 and at a location corresponding to the narrow, threaded throat of the container.

Accordingly, as seen in Fig. 2 of Suzuki, the gate marks of the finished, molded article of Suzuki will be on the inside of the narrow, threaded throat of the container. Thus, as correctly stated by the Office Action at page 3, Suzuki does not teach gate marks of the

molded article that are inwardly apart from said upper end of said insert, and does not teach that the gate marks of the molded article are on said inner surface that is covered by said insert, as required by claim 1.

The Office Action refers to Suzuki's disclosure that two or more runners, which connect the injection gate and the cavity, may be drilled into the upper part of the core. See Suzuki at paragraph [0011]. Based only upon this brief and general disclosure, the Office Action asserts that "one of ordinary skill in the art would have recognized the utility of providing for additional runners, which connect the injection gate with the cavity at different locations along the cavity, depending on the desired number of connection points, as taught by Suzuki" (emphasis added). However, although Suzuki very briefly mentions using two or more runners, Suzuki is silent regarding any position of the runners other than at a top position. Furthermore, Suzuki qualifies the location of the two or more runners by stating: "...two or more runners 32 who connect the injection gate 41 and the cavity 51 mentioned later are drilled in the upper part of a core 31" (emphasis added). See Suzuki at paragraph [0011]. The Office Action completely ignores this requirement that the two or more runners be drilled in the upper part of a core, and misquotes Suzuki as disclosing "two or more runners which are drilled in the core." See the Office Action at page 3.

As clearly seen in Suzuki in Figs. 1, 2 and 6-9, and paragraph [0011], and as agreed to in the personal interview, Suzuki only discloses that the injection gates in the mold are positioned at the top of the mold -- above the highest edge of the blank board and at a location corresponding to the narrow, threaded throat of the container. Suzuki never discloses gate marks of the molded article that are inwardly apart from said upper end of said insert, and never discloses that the gate marks of the molded article are on said inner surface that is covered by said insert. In contrast, Suzuki's disclosure is limited only to the injection gates

being outwardly apart from the upper end of the insert, and to the gate marks always being on a portion of the inner surface that is not covered by the insert.

For the reasons discussed above, Suzuki fails to teach or suggest every feature of claim 1. Specifically, Suzuki fails to teach or suggest an insertion-molded cylindrical article, wherein said mark is positioned at said inner surface of the cylindrical molded body while being inwardly apart from said upper end of said insert in an axial direction and at a position corresponding to a position on said inner surface that is covered by said insert, as required by claim 1. Thus, the Office Action has failed to establish a prima facie case of obviousness over Suzuki. Thus, claim 1 is patentable over Suzuki.

Claims 2 and 21 depend from claim 1 and include all of its limitations. Accordingly, these dependent claims are patentable over Suzuki for at least the same reasons as claim 1. Reconsideration and withdrawal of the rejection are respectfully requested.

II. \$103 Rejections Over Suzuki in view of Asahi Chemical

Claims 3-6 and 12-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of JP 03,286,815 to Asahi Chemical (Asahi). Applicants respectfully traverse the rejection.

Claim 3 recites "[a] method for making an insertion-molded cylindrical article ... comprising ... injecting a molten resin through said injection gate opening ... at a position inwardly apart from said upper end of the insert in an axial direction and at a position corresponding to a position on said molded body inner surface that is covered by said insert..." (emphasis added). Suzuki does not teach or suggest the invention of claim 3, and Asahi does not cure the deficiencies of Suzuki. Thus, Suzuki in view of Asahi would not have rendered obvious the method of claim 3.

As discussed above, and as agreed to in the personal interview, Suzuki is silent regarding any position of the runners other than at a top position, and in fact requires that the

"two or more runners 32 who connect the injection gate 41 and the cavity 51 mentioned later are drilled in the upper part of a core 31" (emphasis added). See Suzuki at paragraph [0011].

This configuration of the Suzuki mold creates problems that are plainly identified in the instant specification. See the instant specification at page 2, line 24 to page 3, line 16.

In particular, when molten resin is injected at a position above an insert, the resin is likely to enter the area between the insert and the mold. By injecting resin from a position covered by the insert, this problem is avoided. One skilled in the art would not have been motivated by Suzuki's disclosure of drilling two or more runners in the upper part of the core to add additional runners to locations other than the top position as required by Suzuki, particularly in the absence of the instant application. For at least these reasons, and the reasons discussed above in Section I, Suzuki does not teach or suggest every feature of claim 3.

Asahi is cited for its disclosure of thermosetting resins. However, Asahi does not teach or suggest the claimed method for making an insertion-molded cylindrical article comprising injecting a molten resin through an injection gate opening at a position inwardly apart from the upper end of an insert in an axial direction and at a position corresponding to a position on said molded body inner surface that is covered by the insert. Thus, Asahi does not cure the deficiencies of Suzuki.

For at least these reasons, Suzuki, alone or in combination with Asahi, fails to teach or suggest every feature of claim 3. Thus, claim 3 is patentable over Suzuki, alone or in combination with Asahi. Claims 4-6 and 12-14 depend from claim 3 and include all of its limitations. Accordingly, these dependent claims are patentable over Suzuki, alone or in combination with Asahi, for at least the same reasons as claim 3. Reconsideration and withdrawal of the rejection are respectfully requested.

III. §112, Second Paragraph, Rejections

Claims 6, 13 and 14 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants respectfully traverse the rejection.

Specifically, the Office Action states that the phrase "partially fitting the insert in the cylindrical shape into the outer mold unit in a state that the core of the injection molding mold is pulled out" renders these claims indefinite, and the Office Action alleges that the meaning of the phrases "partially fitting" and "in a state" are unclear. Applicants respectfully disagree, and assert that these claims satisfy the requirements of §112, second paragraph. However, in a effort to expedite prosecution, claims 6, 13 and 14 are amended to remove the objectionable phrases.

As agreed to in the personal interview, claims 6, 13 and 14 satisfies the requirements of §112, second paragraph, particularly in view of Applicants' disclosure at page 10, lines 7-13. Reconsideration and withdrawal of the rejection are respectfully requested.

IV. New Claims

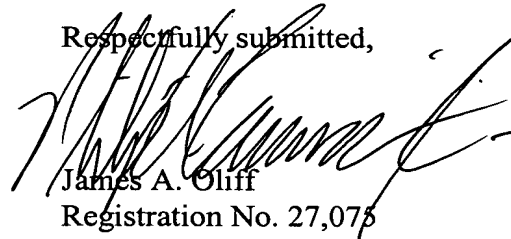
New claim 22 depends from claim 1, and is directed to an insertion-molded cylindrical article wherein said mark is positioned only at said inner surface of the cylindrical molded body while being inwardly apart from said upper end of said insert in an axial direction and only at a position corresponding to a position on said inner surface that is covered by said insert. New claim 23 depends from claim 3, and is directed to a method comprising injecting said molten resin through said injection gate opening toward said molded body inner surface only at a position inwardly apart from said upper end of the insert in an axial direction and only at a position corresponding to a position on said molded body inner surface that is covered by said insert. Support for new claims 22 and 23 can be found in the present specification, for example at Figs. 1, 2 and 4-7, and at page 10, line 22, to page 11, line 12.

VI. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-6, 12-14 and 21-23 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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